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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE 10020738-1 3046 10/786,213 02/25/2004 John Julian Uebbing **EXAMINER** 7590 09/22/2005 KANG, JULIANA K AGILENT TECHNOLOGIES, INC. Legal Department, DL 429 PAPER NUMBER ART UNIT Intellectual Property Administration P.O. Box 7599 2874 Loveland, CO 80537-0599

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No. Applicant(s) 10/786,213 UEBBING ET AL. Examiner Art Unit Juliana K. Kang 2874 The MAILING DATE of this communication appears on the cover sheet with the correspondence address	-
Office Action Summary Examiner Juliana K. Kang The MAILING DATE of this communication appears on the cover sheet with the correspondence address	
Juliana K. Kang 2874 The MAILING DATE of this communication appears on the cover sheet with the correspondence address	
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Period for Reply	
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAY WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).	
Status	
1) Responsive to communication(s) filed on	
2a) This action is FINAL . 2b) This action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the mer	ts is
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.	
Disposition of Claims	
4)⊠ Claim(s) <u>1-15</u> is/are pending in the application.	
4a) Of the above claim(s) is/are withdrawn from consideration.	
5) Claim(s) is/are allowed.	
6)⊠ Claim(s) <u>1-15</u> is/are rejected.	
7) Claim(s) is/are objected to.	
8) Claim(s) are subject to restriction and/or election requirement.	
Application Papers	
9) The specification is objected to by the Examiner.	
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.	
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.1	21(d).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-15	2.
Priority under 35 U.S.C. § 119	
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:	
1. Certified copies of the priority documents have been received.	
2. Certified copies of the priority documents have been received in Application No	
3. Copies of the certified copies of the priority documents have been received in this National Stag	9
application from the International Bureau (PCT Rule 17.2(a)).	
* See the attached detailed Office action for a list of the certified copies not received.	
Attachment(s)	
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date	
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2/25/04. 5) Notice of Informal Patent Application (PTO-152) 6) Other:	

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DETAILED ACTION

Claim Objections

1. Claims 5 and 10 are objected to because of the following informalities: claims 5 and 10 recite "a first pillar" twice and the second occurrence of "a first pillar" appears that it should be "a second pillar" since there are pillars from two different heaters.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Fouquet et al (U.S. Patent 5,699,462, submitted by applicant).

Fouquet et al disclose a total internal reflection optical switch method and apparatus comprising: waveguides (206, 208 in figure 17 and 314, 316 in figure 29 and 318 and 320 in figure 30), a trench where a index matching liquid (222) is filled, a heating system (216, 210) to create a bubble (220) that acts as a mirror to reflect the light from the one waveguide to another waveguide (see figures 17, 29 and 30). Fouquet et al show a bubble that is less than total volume of the trench and the trench that is longer and deeper than the bubble (see figure 17). Since Fouquet et al disclose

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the claimed structure it inherently meets the claimed limitation of having pressure within the bubble that is not substantially increased by pressure exerted by sidewalls of the trench. Fouquet et al also shows pillars (124, 120) that extends form the heaters (204, 214) up the sidewalls of the trench.

Conclusion

- 4. The prior art documents submitted by applicant have been considered and made of record (note the attached copy of form PTO-1449).
- 5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sato et al (U.S. Patent 6,072,924) teach an optical switch using an index matching liquid.
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juliana K. Kang whose telephone number is (571) 272-2348. The examiner can normally be reached on Mon. & Fri. 10:00-6:00 and Tue. & Thur. 10:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rod Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JULIANA KANG PRIMARY EXAMINER

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